

Abstract

A mobile screening unit for screening bulk material. The screening unit comprises a first screener, a second screener, and an elongated mobile support frame having a longitudinal axis. The first screener is mounted to the support frame and extends longitudinally thereon. The first screener has an inlet for receiving the bulk material containing large-sized, medium-sized, and small-sized particles. The first screener also has a first outlet for releasing large-sized particles and a second outlet for releasing medium-sized and small-sized particles. The first screener is used for screening the bulk material along a first direction substantially parallel to the longitudinal axis of the support frame. The second screener is mounted to the support frame and extends longitudinally thereon. The second screener has an inlet for receiving medium-sized and small-sized particles conveyed from the first screener and also has a first outlet for releasing medium-sized particles and a second outlet for releasing small-sized particles. The second screener is used for screening the medium-sized particles from the small-sized particles along a second direction substantially parallel to the longitudinal axis of the support frame. The mobile screening unit enables to screen bulk material containing particles of different sizes into at least three different piles, each pile containing particles of substantially the same size.